

X₆ is D-Leu (l) or D-Phe (f);

X₇ is a D-enantiomeric basic residue;

X₈ is a D-enantiomeric acidic residue;

X₉ is D-Leu (l) or D-Trp (w);

X₁₀ is D-Leu (l) or D-Trp (w);

X₁₁ is a D-enantiomeric acidic residue or D-Asn (n);

X₁₂ is a D-enantiomeric acidic residue;

X₁₃ is D-Leu (l), D-Trp (w) or D-Phe (f);

X₁₄ is a D-enantiomeric basic residue or D-Leu (l);

X₁₅ is D-Gln (q) or D-Asn (n);

X₁₆ is a D-enantiomeric basic residue;

X₁₇ is D-Leu (l);

X₁₈ is a D-enantiomeric basic residue;

Z₁ is RRN-, or RC(O)NR-;

Z₂ is -C(O)NRR, -C(O)OR or -C(O)OH or a salt thereof;

each R is independently -H, (C₁-C₆) alkyl, (C₁-C₆) alkenyl, (C₁-C₆) alkynyl, (C₅-C₂₀)

aryl, (C₆-C₂₆) alkaryl, 5-20 membered heteroaryl or 6-26 membered alkheteroaryl or a

1 to 7-residue peptide or peptide analogue in which one or more bonds between residues 1 through 7 are independently a substituted amide, an isostere of an amide or an amide mimetic;

each " - " between residues X₁ through X₁₈ independently designates an amide linkage, a substituted amide linkage, an isostere of an amide or an amide mimetic; or

(ii) a 14 to 21- residue deleted D-enantiomeric peptide or peptide analogue according to formula (I) in which at least one and up to eight of residues X₁, X₂, X₃, X₄, X₅, X₆, X₇, X₈, X₉, X₁₀, X₁₁, X₁₂, X₁₃, X₁₄, X₁₅, X₁₆, X₁₇ and X₁₈ are optionally deleted; or

(iii) an 18 to 22- residue altered D-enantiomeric peptide or peptide analogue according to formula (I) in which at least one of residues X₁, X₂, X₃, X₄, X₅, X₆, X₇, X₈, X₉, X₁₀, X₁₁, X₁₂, X₁₃, X₁₄, X₁₅, X₁₆, X₁₇ and X₁₈ is conservatively substituted with another D-enantiomeric residue.

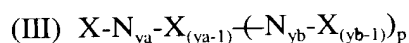
16. (Twice amended) A multimeric ApoA-I agonist compound which comprises formula (II):



or a pharmaceutically acceptable salt thereof, wherein:

- each m is independently an integer from 0 to 1;
- n is an integer from 0 to 10;
- each "HH" is independently a D-enantiomeric peptide or peptide analogue according to Claim 1;
- each "LL" is independently a bifunctional linker; and
- each " - " independently designates a covalent linkage.

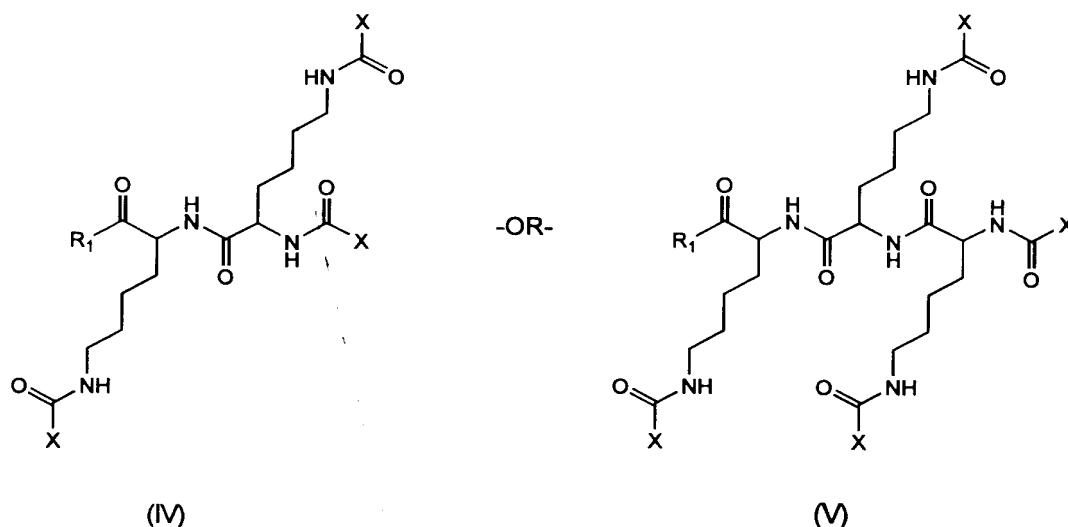
17. (Twice amended) A multimeric ApoA-I agonist compound which comprises formula (III):



or a pharmaceutically acceptable salt thereof, wherein:

- each X is independently $HH-(LL_m-HH)_nLL_m-HH$;
- each HH is independently a D-enantiomeric peptide or peptide analogue according to Claim 1;
- each LL is independently a bifunctional linker;
- each m is independently an integer from 0 to 1;
- each n is independently an integer from 0 to 8;
- N_{y_a} and N_{y_b} are each independently a multifunctional linking moiety where y_a and y_b represent the number of functional groups on N_{y_a} and N_{y_b} , respectively;
- each y_a or y_b is independently an integer from 3 to 8;
- p is an integer from 0 to 7; and
- each "—" independently designates a covalent bond.

18. (Twice amended) A multimeric ApoA-I agonist compound which comprises formula (IV) or (V):



or a pharmaceutically acceptable salt thereof, wherein:

each X is independently $HH-(LL_m-HH)_nLL_m-HH$;

each HH is independently a D-enantiomeric peptide or peptide analogue according to Claim 1;

each LL is independently a bifunctional linker;

each n is independently an integer from 0 to 1;

each m is independently an integer from 0 to 8;

R₁ is -OR or -NRR; and

each R is independently -H, (C₁-C₆) alkyl, (C₁-C₆) alkenyl, (C₁-C₆) alkynyl, (C₅-C₂₀) aryl, (C₆-C₂₆) alkaryl, 5-20 membered heteroaryl or 6-26 membered alkheteroaryl.

25. (Twice amended) An ApoA-I agonist-lipid complex comprising an ApoA-I agonist and a lipid, wherein the ApoA-I agonist is a D-enantiomeric peptide or peptide analogue according to Claim 1, a multimeric ApoA-I agonist compound according to Claim 16, a multimeric ApoA-I agonist compound according to Claim 17, or a multimeric ApoA-I agonist compound according to Claim 18.

33. (Twice amended) A pharmaceutical composition comprising an ApoA-I agonist and a

pharmaceutically acceptable carrier, excipient or diluent, wherein the ApoA-I agonist is a D-enantiomeric peptide or peptide analogue according to Claim 1, a multimeric ApoA-I agonist compound according to Claim 16, a multimeric ApoA-I agonist compound according to Claim 17, or a multimeric ApoA-I agonist compound according to Claim 18.

Please add new Claims 53-75:

53. The ApoA-I agonist compound of Claim 1 which is the altered D-enantiomeric peptide or peptide analogue according to formula (I).
54. The ApoA-I agonist compound of Claim 53 in which the D-enantiomeric hydrophobic residues are fixed according to formula (I) and at least one non-fixed residue is conservatively substituted with another D-enantiomeric residue.
55. The ApoA-I agonist compound of Claim 54 in which:
- X₁ is D-Pro (p), Gly (G), D-Asn (n) or D-Ala (a);
 - X₂ is D-Ala (a), D-Leu (l) or D-Val (v);
 - X₃ is D-Leu (l);
 - X₅ is D-Leu (l) or D-Phe (f);
 - X₆ is D-Leu (l) or D-Phe (f);
 - X₉ is D-Leu (l) or D-Trp (w);
 - X₁₀ is D-Leu (l) or D-Trp (w);
 - X₁₃ is D-Leu (l), D-Trp (w) or D-Phe (f);
 - X₁₇ is D-Leu (l); and
- at least one of X₄, X₇, X₈, X₁₁, X₁₂, X₁₄, X₁₅, X₁₆ and X₁₈ is conservatively substituted with another D-enantiomeric residue.
56. The ApoA-I agonist compound of Claim 53 in which the D-enantiomeric hydrophilic residues are fixed according to formula (I) and at least one non-fixed residue is conservatively substituted with another D-enantiomeric residue.
57. The ApoA-I agonist compound of Claim 56 in which:
- X₄ is D-Asp (d) or D-Glu (e);
 - X₇ is D-Arg (r), D-Lys (k) or D-Orn;

X₈ is D-Asp (d) or D-Glu (e);
X₁₁ is D-Asn (n) or D-Glu (e);
X₁₂ is D-Glu (e);
X₁₄ is D-Lys (k), D-Arg (r) or D-Orn;
X₁₅ is D-Gln (q) or D-Asn (n);
X₁₆ is D-Lys (k), D-Arg (r) or D-Orn;
X₁₈ is D-Asn (n) or D-Gln (q); and

at least one of X₁, X₂, X₃, X₅, X₆, X₉, X₁₀, X₁₃ and X₁₇ is conservatively substituted with another D-enantiomeric residue.

58. The ApoA-I agonist compound of Claim 56 in which X₃ is D-Leu (l), X₆ is D-Phe (f), X₉ is D-Leu (l) or D-Trp (w), X₁₀ is D-Leu (l) or D-Trp (w) and at least one of X₁, X₂, X₅, X₁₃ and X₁₇ is conservatively substituted with another D-enantiomeric residue.
59. The ApoA-I agonist compound of Claim 55 or 57 in which the substituting D-enantiomeric residue is classified within the same sub-category as the substituted D-enantiomeric residue.
60. The ApoA-I agonist compound of Claim 1 which is the deleted D-enantiomeric peptide or peptide analogue according to formula (I).
61. The ApoA-I agonist compound of Claim 60 in which one or two helical turns of the D-enantiomeric peptide or peptide analogue is optionally deleted.
62. The ApoA-I agonist compound of Claim 1 which is an 18-residue D-enantiomeric peptide or peptide analogue according to formula (I).
63. The ApoA-I agonist compound of Claim 62 in which
the "-" between residues designates -C(O)NH-;
Z₁ is H₂N-; and
Z₂ is -C(O)OH or a salt thereof.

64. The ApoA-I agonist compound of Claim 63, in which;
X₁ is D-Ala (a), Gly (G), D-Asn (n) or D-Pro (p);
X₂ is D-Ala (a), D-Val (v), or D-Leu (l);
X₃ is D-Leu (l);
X₄ is D-Asp (d) or D- Glu (e);
X₅ is D-Leu (l) or D-Phe (f);
X₆ is D-Leu (l) or D-Phe (f);
X₇ is D-Arg (r), D-Lys (k) or D-Orn;
X₈ is D-Asp (d) or D-Glu (e);
X₉ is D-Leu (l) or D-Trp (w);
X₁₀ is D-Leu (l) or D-Trp (w);
X₁₁ is D-Glu (e) or D-Asn (n);
X₁₂ is D-Glu (e);
X₁₃ is D-Leu (l), D-Trp (w) or D-Phe (f);
X₁₄ is D-Arg (r), D-Lys (k) or D-Orn;
X₁₅ is D-Gln (q) or D-Asn (n);
X₁₆ is D-Arg (r), D-Lys (k) or D-Orn;
X₁₇ is D-Leu (l); and
X₁₈ is D-Arg (r), D-Lys (k) or D-Orn.
65. The multimeric ApoA-I agonist compound of Claim 16, 17 or 18 in which the bifunctional linker is cleavable.
66. The multimeric ApoA-I agonist compound of Claim 16, 17 or 18 in which n is 0.
67. The multimeric ApoA-I agonist compound of Claim 66 in which m is 0.
68. The multimeric ApoA-I agonist compound of Claim 16, 17 or 18 in which each HH is independently an altered D-enantiomeric peptide or peptide analogue.
69. The multimeric ApoA-I agonist compound of Claim 16, 17 or 18 in which each HH is independently a deleted D-enantiomeric peptide or peptide analogue.
70. The ApoA-I agonist-lipid complex of Claim 25 in which the lipid is sphingomyelin.

71. The pharmaceutical composition of Claim 33 in which the ApoA-I agonist is in the form of an ApoA-I agonist-lipid complex, said complex comprising the ApoA-I agonist compound and a lipid.
72. The pharmaceutical composition of Claim 71 in which the lipid is sphingomyelin.
73. The pharmaceutical composition of Claim 71 which is a lyophilized powder.
74. The method of Claim 40 or 50 in which said subject is a human.
75. The method of Claim 40 or 50 in which about 0.5 mg/kg to about 100 mg/kg ApoA-I agonist is administered to said subject.